

MSP-300

WIRELESS OUTDOOR SIREN

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The MSP-300 wireless siren provides information about alarm situations by means of optical and acoustic signaling. The siren works with:

- the PERFECTA 16-WRL and PERFECTA 32-WRL control panels,
- the MTX-300 controller.

This manual applies to the siren with firmware version 1.01 (or newer).

1. Features

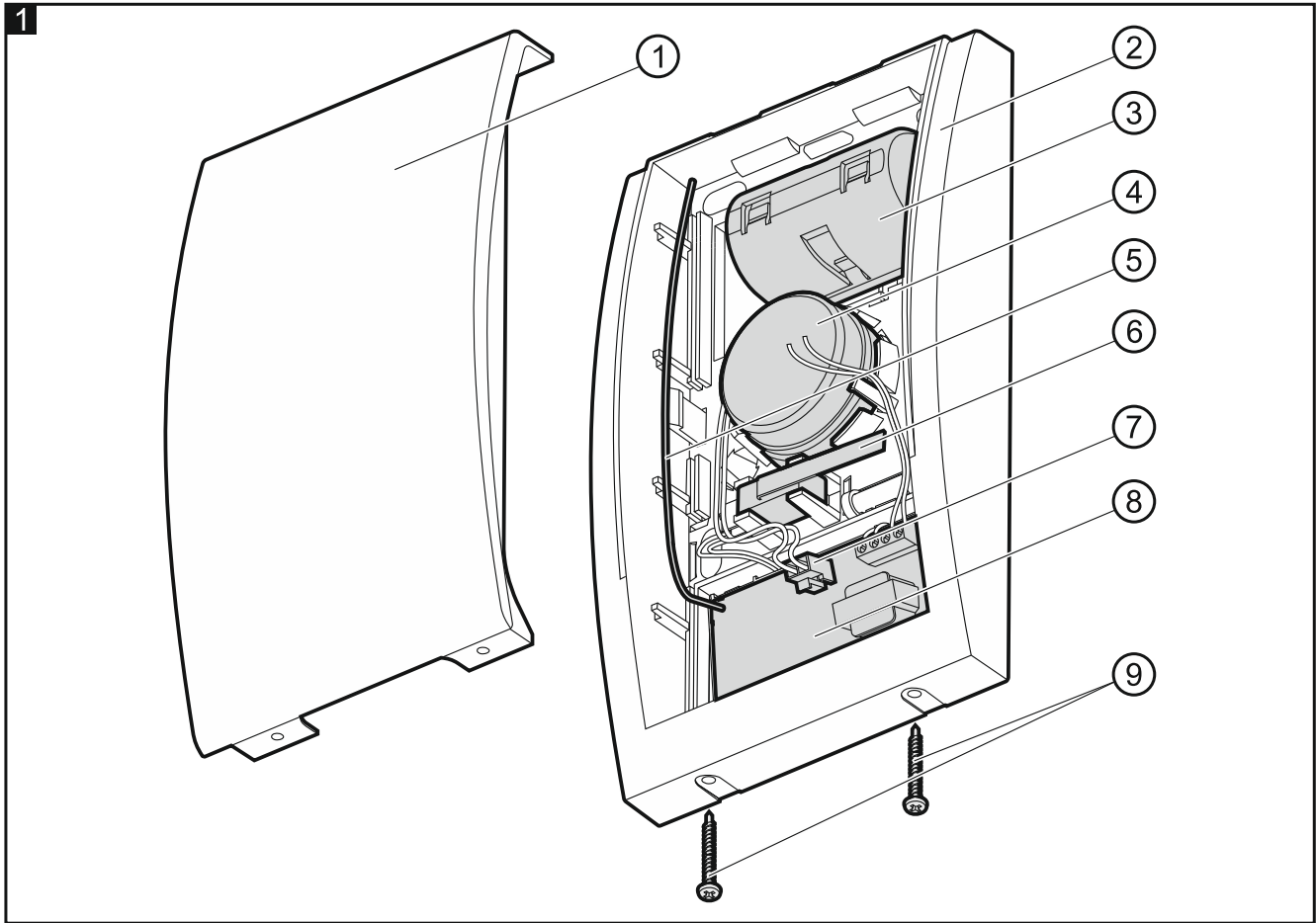
- Two-way encrypted radio communication using 433 MHz band.
- Acoustic signaling by means of piezoelectric transducer.
- Optical signaling by means of LEDs.
- Remote configuration.
- Power supply from 3.6 V lithium thionyl chloride battery.
- Battery status control.
- Weatherproofed electronic circuit.
- Tamper protection against cover removal and tearing enclosure from the wall.
- High-impact polycarbonate enclosure, featuring a very high mechanical strength.

2. Specifications

Operating frequency band	433.05 ÷ 434.79 MHz
Radio communication range (in open area)	up to 400 m
Battery	ER34615 3.6 V / 13 Ah
Battery life expectancy.....	up to 3 years
Standby current consumption.....	0.6 mA
Maximum current consumption	500 mA
Sound pressure level (at 1 m distance).....	up to 105 dB
Environmental class according to EN50130-5	IIIA
Operating temperature range	-40°C ...+55°C
Maximum humidity.....	93±3%
Dimensions	148 x 254 x 64 mm
Weight.....	820 g

Hereby, SATEL sp. z o.o., declares that this siren is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. The declaration of conformity may be consulted at www.satel.eu/ce

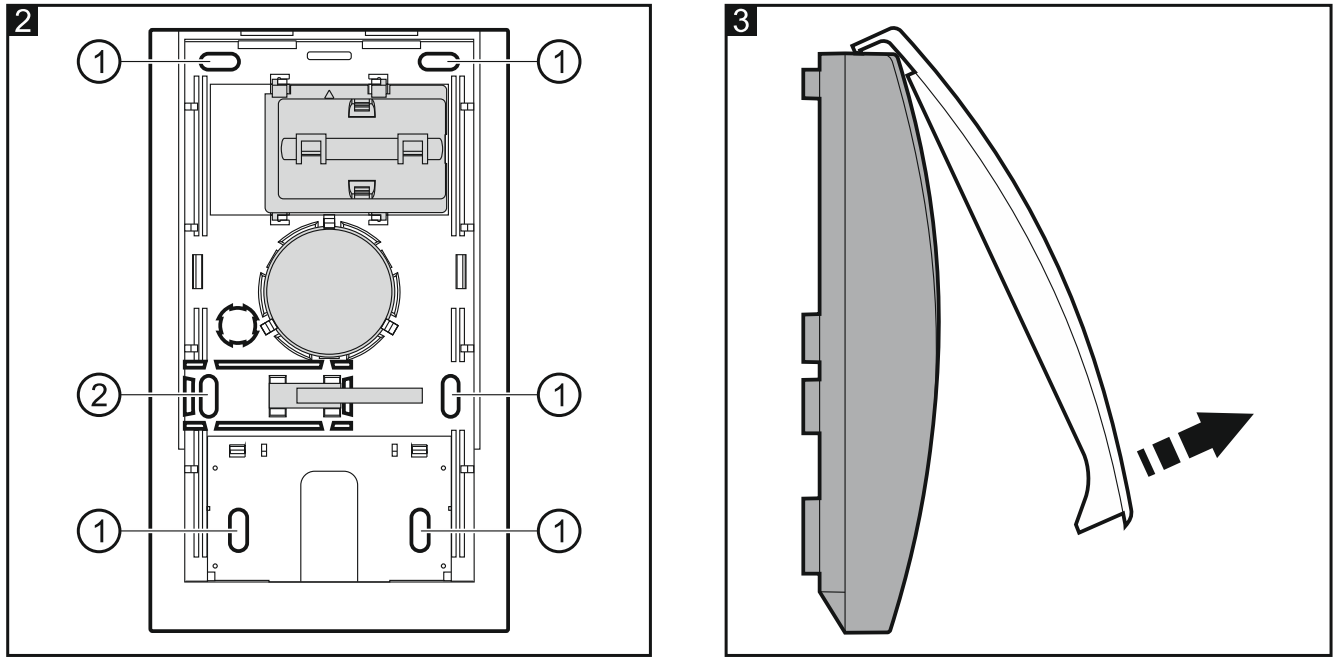
3. Description



Explanations for Fig. 1:

- ① enclosure cover.
- ② enclosure base.
- ③ battery cover.
- ④ piezoelectric transducer.
- ⑤ antenna.
- ⚠ **Never shorten or deform the antenna.**
- ⑥ tamper switch (tamper alarm triggered if open).
- ⑦ battery connector.
- ⑧ electronics module.
- ⑨ cover locking screws.

Enclosure base



Explanations for Fig. 2:

- ① mounting hole.
- ② tamper mounting hole.

Triggering the alarm signaling

The alarm signaling is triggered:

- on receiving a radio command from the control panel / controller;
- on opening the tamper switch.

1		Two sound frequencies (1450 Hz/2100 Hz) alternating within 1 second
2		Sound with rising frequency (from 1450 Hz to 2100 Hz) within 1 second
3		Sound with falling frequency (from 2100 Hz to 1450 Hz) within 1 second
4		Sound with smoothly rising and falling frequency (1450 Hz – 2100 Hz – 1450 Hz) within 1 second

Table 1. Tone types for acoustic signaling.

Duration and type of acoustic signaling can be programmed in the control panel / controller. A command received from the control panel / controller can stop the signaling earlier.

Alarm signaling triggered by radio

The command sent by the control panel / controller contains information about what signaling is to be triggered (whether the optical signaling is to be triggered, what type of acoustic signaling is to be triggered, etc.).

Alarm signaling triggered by opening tamper switch

Opening the tamper switch triggers optical and acoustic signaling.

Opening the tamper switch will not trigger any signaling in the following cases:

- after connecting the battery – tamper alarm signaling will only be unblocked after the standby mode entering command is received from the control panel / controller, provided that the tamper switch has been closed for 30 seconds, (the command to enter the standby mode is sent by the control panel / controller after exiting the service mode, and by the controller also after terminating communication with the MTX SOFT program or after restart),
- when the control panel / controller is running in service mode or communication between the controller and the MTX SOFT program is in progress.

When the tamper signaling is blocked, the leftmost LED is flashing every 10 seconds.

Periodic transmissions

Every 15 minutes, the siren sends a transmission with information on the current status of the tamper switch and battery. Periodic transmissions are used to monitor presence and operation of the siren.

Power supply

The siren is powered from a 3.6 V lithium thionyl chloride battery. It is a high-current battery, characterized by high capacity. The battery is offered by SATEL.



There is a danger of battery explosion when using a different battery than recommended by the manufacturer, or handling the battery improperly.

Be particularly careful during installation and replacement of the battery. The manufacturer is not liable for the consequences of incorrect installation of the battery.

The used batteries must not be discarded, but should be disposed of in accordance with the existing rules for environment protection.

Given the specific nature of the battery, it must be properly initialized to reach the required performance. Therefore, when connecting a new battery, always follow the procedure below:

1. Press and hold down the tamper switch.
2. Connect the new battery.
3. When the leftmost LED on the siren starts flashing every second, release the tamper switch.

Flashing of the leftmost LED indicates that the first phase of battery initialization is in progress. After 5 minutes, when this phase is completed, the siren is ready for work. The second phase of battery initialization lasts 3 hours, without however limiting functionality of the siren. This phase is signaled by two flashes every 30 seconds.

4. Installation and start-up

The siren must be installed on the wall, high above the floor, at a hard to access location, so as to minimize the risk of tampering. Make sure that some free space is left above the siren (at least 2.5 cm). Otherwise, it will be impossible to replace the cover.

1. Remove the cover locking screws.
2. Lift up the enclosure cover by approx. 60° and remove it (see Fig. 3).
3. Connect the battery and register the siren in the control panel (see the PERFECTA control panel installer manual) / the controller (see the MTX-300 manual).

Note: The battery is to be connected just before installing the siren.

4. Replace the siren cover.
5. Place the siren in the location intended for its installation.
6. Make sure that transmissions from the siren reach the control panel / the controller and check the level of radio signal (see the PERFECTA control panel manual / the MTX-300 manual). In order to send a transmission, open the tamper switch of the siren. If the transmission fails to be received or the signal level is lower than 40%, select another installation place and repeat the test.
7. Remove the siren cover.
8. Disconnect the battery.
9. Move aside the catches holding the electronics module and remove it.
10. Place the enclosure base on the wall and mark the location of mounting holes (see Fig. 2). Be sure to take into account the tamper mounting hole.
11. Drill the holes for wall plugs (screw anchors).
12. Secure the enclosure base to the wall with wall plugs (screw anchors) and screws. Remember about the tamper mounting hole. The wall plugs (screw anchors) and screws delivered with the siren are intended for brick, concrete and similar mounting surfaces. For other surfaces (e.g. drywall, wood, styrofoam), use other wall plugs (screw anchors), as required.
13. Secure the electronics module in the enclosure base.
14. Connect the battery.
15. Replace the siren cover and fasten it with screws.
16. Test the siren for proper operation.